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Review of Assessment Activities

In this Issue

Hello to our friends and colleagues in the INES project! This July 2004 newsletter presents information on research conducted in member countries on teachers and teaching. The article discusses numerous studies on attracting and retaining quality teachers, their professional development needs and opportunities, teachers' attitudes and their perceptions, as well as regular data collections. Additionally, the article provides information on new research relating specifically to the connection between teaching and learning.

Also included in this issue is a country highlight focusing on assessment and testing in Japan. The article provides an overview of Japan's education system and information on entrance exams and national surveys of student achievement. As usual, the newsletter also provides updates on Networks A, B, and C, and the PISA Governing Board, and a brief look at what is currently happening in national assessment programs in member countries.

We thank all those who contributed to the newsletter, including Ryo Watanabe, from the National Institute for Educational Policy Research, for contributing the article on pupil assessment in Japan; Dan Andersson and Anna Jonsson of Sweden for updating us on Network B; and Jaap Scheerens and Maria Hendriks of the Netherlands for sharing information on Network C. We appreciate your efforts in keeping us informed of activities from around the INES Project. We hope you enjoy the latest newsletter!

Teaching and Learning

Policy makers and researchers across OECD countries have long been interested in collecting data on teachers and their teaching practices, and, as our request for information uncovered, many countries are actively engaged in multiple studies on these topics. Many of these studies are based on surveys of teachers, though some studies described utilizing additional data collection techniques (e.g., observation of practice). Data from such studies are used in OECD countries to assist in better predicting and making policies related to the supply and demand of teachers; documenting the extent of professional development opportunities and needs; and learning about teachers' attitudes and perceptions of their profession. Additionally, some of the newer studies are examining important questions related to the impacts of teaching on learning. Australia, Austria, Belgium

(Flemish and French communities), Denmark, Iceland, Sweden, Switzerland, and the United States provided information.

Studies of supply and demand

Australia has conducted a wealth of studies on teachers and teaching, with quite a few focusing specifically on attracting or retaining quality teachers. *Demand and Supply of Primary and Secondary School Teachers in Australia* incorporates published data and qualitative research on teachers and principals. Building on a series of research papers, this report touches on various topics, such as the ageing of the teacher workforce, gender trends, and teacher salaries. *Australia's Teachers: Australia's Future—Advancing Innovation, Science, Technology and Mathematics* identifies strategies that will increase the number of talented people who enter teaching professions, especially in the fields of science, technology, and mathematics. In addition, current research reported in *Societal Changes and Related Issues for the Teaching Workforce* focuses specifically on teachers in their first ten years of teaching. Using literature reviews, surveys, and site visits, researchers plan to propose strategies to attract, retain, and regain quality teachers as well as approaches to working with new generations of teachers.

Similarly, a **Swiss** report by the *Service de la Recherche en Education (SRED)* provides an overview on the demand and supply of teachers in each of the Swiss cantons. The report includes information on teachers' wages and workload, among other data, and presents an account of recruitment practices as well as provides suggestions for educational authorities.

Focusing on this same topic is a current OECD study, *Attracting, Developing and Retaining Effective Teachers*, in which twenty-five countries are participating. The purpose of this study is to provide policy makers with information and analysis to aid them in creating and implementing policies that will produce high quality teaching and learning. The country background report **Australia** prepared for the project, for example, uses a variety of data sources, including survey results, research reports, discursive literature, and interviews and consultations with field experts. The report covers a range of topics: the national context (social, cultural, economic, and educational), profiles of the teaching profession, different stages of a teaching career (induction, the initial years, retention, professional learning), and current policy concerns (teacher quality, professional standards, teacher supply). **Denmark, Sweden, Switzerland**, and 20 other Network A countries also take part in this study.

Austria reports utilizing research from international studies, including two conducted by TIMSS on how math and science are taught and on school violence. **Switzerland** also reports utilizing data from the teacher surveys from TIMSS, and **Iceland** uses those surveys from TIMSS and PIRLS international studies as well.

Teachers' professional development and well-being

In addition to teacher supply, another common area of study pertains to teacher education, professional development, and in general the techniques that help to build and maintain high-quality teach-

ing skills. *PD 2000 **Australia**: A National Mapping of School Teacher Professional Development*, was conducted in 2000 from February until mid-June. In order to provide the national government with information about trends and progress in teacher professional development, the study makes use of literature reviews, surveys of a sample of schools and teachers, and consultations with personnel from government and non-government authorities, the education systems, universities, professional associations, schools, and providers.

Sweden also is examining the quality of its teacher education programs, which falls under the responsibility of the *Högskoleverket (National Agency for Higher Education)*. In **Austria**, researchers are currently conducting a study due to finish in 2005 on how teachers develop their teaching skills. Focusing on teachers in primary, compulsory secondary, and special-needs schools who started their teacher training in 1995, the study is analyzing how personality traits, study and working conditions, studying and on-the-job-behavior affect both the skills and the well-being of these teachers, both during university and in the classroom.

In addition to this teacher training study, there are a number of other **Austrian** studies that focus specifically on the well-being of teachers. One such study analyzes teachers' stress, the reasons behind it, and the results of such strain, while another focuses on teachers' welfare in relation to the number of hours they work. Furthermore, researchers in Austria conducted a study that specifically examines teachers' fears and coping strategies. This research is based on a random sampling of 11,000 primary

school teachers and looks at humor, among other techniques, as a coping mechanism.

Other countries also reported studies on the welfare of their teachers. **Sweden**, for example, uses a teacher survey to determine teachers' needs in various fields and schools. **Belgium (French community)** reports that a 2001 survey sent to all primary school principals and selected modern language teachers provides some objective information regarding the language teachers' working conditions and their feelings about such conditions.

Teachers' attitudes and perceptions

Besides teacher supply, professional development, and perceptions, some countries also have studied teachers' opinions and attitudes toward schooling and other topics. **Austria** describes a two-part study that looks at experiences with and views on democracy at school. Interviews with teachers give insight into their attitudes toward student and parent involvement in making decisions; and interviews with students and parents provide an assessment of teachers' professional behavior depending on their view of student and parental participation. **Sweden** also reports a study on the attitude towards school not only of teachers, but also of students, parents, and the general public. Additionally, *Nationell Utvärdering*, to be published in the fall, is a national evaluation of 6800 randomly chosen year 9 students, teachers, principals, and parents. The evaluation includes a general teacher survey and teacher questionnaires related to the topic of

teaching. In 2003, **Belgium (French community)** conducted a national-level survey asking teachers about reform in the school systems. The survey was sent to preschool, primary, secondary, and special education teachers and assesses the progress schools have made in applying the reforms prescribed by the government.

Regular data collections

A number of countries also described regular data collections related to teachers. **Australia** describes a study entitled *Teachers in Australian Schools*, which presents information on a selection of quantifiable teacher characteristics, such as personal profile of the teaching profession, current position, professional qualification, career intentions, further professional development, and membership in organizations. **Sweden** reports that basic data is collected yearly and includes the following statistics: number of male and female teachers, pupil-teacher ratio, type of employment (e.g. full time, on leave), and educational training. The school inspections conducted by the National School Inspectorate of the Swedish National Agency for Education also provide valuable supplemental information on teachers and teaching. In **Switzerland**, the *National Statistical Teacher Survey* collects basic information on teachers, including demographic data, teacher education, and description of the profession. In the **United States**, the National Center for Education Statistics (NCES) conducts the *Schools and Staffing Survey* every four years. This survey consists of four questionnaires directed to schools, teachers, principals, and school districts and focuses on teacher demand and shortage,

characteristics of teachers and administrators, school programs, and general conditions in schools. It also collects data on other topics, including teacher compensation, district hiring practices, and basic student characteristics.

Connecting teaching and learning

In addition to regular data collections and special studies on teacher supply, professional development, and attitudes, member countries also report research that relates specifically to the relationship between teacher characteristics or teaching practice and student achievement or affective outcomes. In **Australia**, *Investigating Teacher Professional Development and Student Learning Outcomes* explores links between teachers' professional development—what they learn and subsequent improvement—and student learning outcomes. The 2002 study focused specifically on professional development programs and its effects in eight different schools. In addition, *Teacher Evaluation in Australia* documents and examines current practices for evaluating teachers in schools and attempts to answer the following questions: How is teacher evaluation done? Who does it and what standards do they use? How well do current evaluation methods fit with the goal of building schools as accountable professional communities? This report also examines the relationship between current evaluation practices and the quality of teaching and learning.

Austria details a study on the connection between teachers' educational approach and the well-being of students. Austria also reports a series of studies looking at the impact of various classroom

management methods on students' active classroom participation and on the extent of disruptions in the classroom. The first study in the series examined the effects in compulsory secondary schools, while the two most recent studies focused on upper secondary schools. The focal point of the series is the classroom management skills of teachers considered successful.

Belgium (Flemish community) reports research by the *Vrije Universiteit Brussel* in 1999 on the impact that the gender of the teaching staff and management has on students. The study focuses on the differing values of male and female teachers, varying attitudes toward schools and school climate, and differences between male and female school managers. The influence of these gender differences on students is measured by both their cognitive performance, such as grade repetition and math abilities, and their attitudes.

Research on this subject in **Sweden** includes a current national-level evaluation project on the reasons for variations in achievement, part of which focuses on teachers and teaching. The report will be published in spring 2005. Additionally, observations and analyses of math lessons, teaching, and student learning done by Göteborg University examine the impact of economic resources on educational outcomes.

In addition, there are a number of cross-national studies pertaining to the topic of teaching and student achievement. **Denmark**, for example, took part in the *Pilot Review to Examine Quality and Equity in School Outcomes*. The study was conducted in conjunction with OECD and touches upon this topic but is not an in-depth analysis of teacher's impacts.

Publications

Country	Publication Title	Web address or Bibliography
Australia	<i>Demand and Supply of Primary and Secondary School Teachers in Australia</i>	www.mceetya.edu.au
	<i>Australia's Teachers: Australia's Future - Advancing Innovation, Science, Technology and Mathematics</i>	www.dest.gov.au
	<i>PD 2000 Australia: A National Mapping of School Teacher Professional Development</i>	http://qualityteaching.dest.gov.au/Content/Item_936.htm
	<i>Teachers in Australian Schools</i>	http://www.dest.gov.au/schools/publications/2001/pd/teachers1999.htm (executive summary) http://www.griffith.edu.au/centre/clme/publications/TIASreport.htm (full report)
	<i>Investigating Teacher Professional Development and Student Learning Outcomes</i>	www.acer.edu.au
	<i>Teacher Evaluation in Australia: A Survey of Current Policies and Practices and Their Relationship to the Improvement of Teaching and Learning</i>	www.acer.edu.au
	<i>Schools Australia</i>	www.abs.gov.au
Austria	Study on teacher well-being at Austrian schools	Lechner, Reiter et al. (1995). Das Befinden von Lehrerinnen und Lehrern an österreichischen Schulen. Innsbruck: Studienverlag.
	Study on experiences with and views on democracy at school	Eder, F. (1998). Schule und Demokratie. Untersuchungen zum Stand der demokratischen Alltagskultur an Schulen. Innsbruck: Studienverlag.
	Study on working hours and teachers' well-being in Austria	http://www.sora.at/lehrer2000/ LehrerIn 2000. (2000). Arbeitszeit, Zufriedenheit und Gesundheit der LehrerInnen in Österreich. Forschungsbericht. Wien: Wentner& Havranek, SORA, AKH Wien.

Publications

Country	Publication Title	Web address or Bibliography
Austria	Study on how mathematics and science are taught	Eder, F. & Mayr, J. (2002). Die Primadonna, das Aschenputtel und die Unschuld vom Lande: Vergleichende Befunde zu den Schulen der Zehn- bis Vierzehnjährigen. In: Eder, F., Grogger, G. & Mayr, J. (Hrsg., 2002). Sekundarstufe I: Probleme – Praxis - Perspektiven (S. 101 - 134). Innsbruck: Studienverlag.
	Data on violence at school, looking at how frequently teachers are violent	Krumm, V., Lamberger-Baumann, B. & Haider, G. (1997). Gewalt in der Schule - auch von Lehrern. Empirische Pädagogik, 11, 257 - 274.
	Study on teachers' fears and coping strategies	Katschnig, T. (2004). Lehrer/innenängste und deren Bewältigung. Habilitationsschrift. Wien.
	Study on how teachers develop teaching skills	Mayr, J. (2002). Sich Standards aneignen: Befunde zur Bedeutung der Lernwege und der Bearbeitungstiefe. Journal für Lehrerinnen- und Lehrerbildung, 2 (1), 29-37.
	Research on the connection between teachers' educational approach and the well-being of students	Eder, F. (im Druck) Der Einfluss einzelner Lehrpersonen auf das Befinden von Schülerinnen und Schülern. In: T. Hascher (Hrsg.) Wohlbefinden in der Schule. Bern: Haupt Verlag.
	Studies on the impact of different class management practices on students' active participation in the classroom and the extent of classroom disturbances	http://www.ph-linz.at/staff/maj/index_idk.htm (literature references) Mayr, J., Eder, F. & Fartacek, W. (1991). Mitarbeit und Störung im Unterricht: Strategien pädagogischen Handelns. Zeitschrift für Pädagogische Psychologie, 5. Jg., H.1, S. 43-55. Mayr, J. (2004). Mitarbeit und Störung im Unterricht: Pädagogische Handlungsstrategien von Lehrern an höheren Schulen. Unser Weg, 59. Jg., H. 1, S. 21-26.
	Studien zur Bildungsforschung und Bildungspolitik (Studies on educational research and educational policy)	www.studienverlag.at
	Journal für Schulentwicklung (School development journal)	http://www.studienverlag.at/titel.php3?TITNR=1070
	Journal für Lehrerinnen- und Lehrerbildung (Teacher training journal)	http://www.studienverlag.at/titel.php3?TITNR=1066
	Erziehung und Unterricht (Education and classroom teaching)	http://www.oebvhpt.at http://www.e-lisa.at/magazine/e_u/index.asp
Belgium (Flemish Community)	The teaching sex	Mr. I. Glorieux & Mr. M. Elchardus, Vrije Universiteit Brussel, 1999
Belgium (French Community)	<i>Dans quelles conditions les langues modernes sont-elles enseignées ? Enquête auprès des directeurs des écoles primaires et d'un échantillon de maîtres de langue, en Communauté française</i>	http://www.enseignement.be/@librairie/documents/ressources/076/monographie.pdf Blondin, C. & Straeten, M.-H. (2002). <i>Dans quelles conditions les langues modernes sont-elles enseignées ? Enquête auprès des directeurs des écoles primaires et d'un échantillon de maîtres de langue, en Communauté française</i> . Université de Liège : Service de Pédagogie expérimentale.
	<i>Pour améliorer l'apprentissage d'une langue moderne à l'école primaire</i>	http://www.enseignement.be/@librairie/documents/ressources/076/synthese/2eme_article.pdf Blondin, C. & Straeten, M.-H. (2003). Pour améliorer l'apprentissage d'une langue moderne à l'école primaire. <i>Le Point sur la Recherche en Éducation</i> , 27, 3-28.
	<i>La consultation des enseignants du fondamental</i>	Van Campenhoudt, L., Hubert, G., Van Espen, A., Lejeune, A., Franssen, A., Huynen, P. & Cartuyvels Y. (2004). <i>La consultation des enseignants du fondamental. Rapport réalisé à la demande de Jean-Marc Nollet, Ministre de l'enfance et de l'enseignement fondamental de la Communauté française Wallonie-Bruxelles</i> . Bruxelles : Centre d'études sociologiques des Facultés universitaires Saint-Louis.
	<i>La consultation des enseignants du secondaire</i>	Van Campenhoudt, L., Franssen, A., Hubert, G., Van Espen, A., Lejeune, A. & Huynen P. (2004). <i>La consultation des enseignants du secondaire. Rapport élaboré pour la Commission de pilotage</i> . Bruxelles : Centre d'études sociologiques des Facultés universitaires Saint-Louis.
Iceland	NETLA	http://netla.khi.is/
Sweden (English titles are approximate translations.)	basic data on teachers	http://www.skolverket.se/english/statistics/index.shtml
	<i>Attityder till skolan</i> (study on attitudes towards school of students, teachers, the general public, and parents)	http://www2.skolverket.se/BASIS/skolbok/webext/trycksak/DDD/1299.pdf
	<i>The First Sweet Years - Teachers' First Experiences in Their Profession</i>	De första ljuva åren - lärares första tid i yrket, Göran Fransson & Åsa Morberg (red.), studentlitteratur 2001.
	<i>Educational Scientist Without Frontiers - Four Studies on Foreign Teachers in Swedish Schools</i>	Gränslös pedagog - fyra studier om utländska lärare i svensk skola, Göteborg studies in educational sciences 190, 2003.
	<i>Guest in Non-reality - Diary by a 48-year-old Student in Grade 7</i>	Gäst hos överkligheten - en 48-årig sjundeklassares dagbok, Gunilla Granath, Studentlitteratur 2002.
	<i>Four Years Beyond the Examination - How Preschool Teachers Experience Their Educational Work and Traces of Teacher Education</i>	Fyra år efter examen - Hur förskollärare erfar pedagogiskt arbete och lärarutbildningens spår, Inger Hensvold, HLF förlag, Studies in educational sciences, 2003, Stockholm.

Publications

Country	Publication Title	Web address or Bibliography
Sweden	<i>The First Year - Scenes from a Classroom</i>	Första året - scener ur ett klassrum, Daniel Pavlica, Bokförlaget DN 1999.
	<i>Gender Perspective on Teaching - on Women Classroom Teachers' Life and Work</i>	Genusperspektiv på lärargärning - om kvinnliga klasslärares liv och arbete, Eva Gannerud, Göteborg studies in educational sciences, 1999.
	<i>Teacher of Tomorrow</i>	Lärare av imorgon, Ingrid Carlgren, Ference Marton, Lärarförbundets förlag 2000.
	<i>Teachers' Life and Work in a Gender Perspective</i>	Lärares liv och arbete i ett genusperspektiv, Eva Gannerud 2001, Liber.
	<i>Teachers' Competence</i>	Lärarkompetens, Arne Maltén, Studentlitteratur, 1995.
	<i>Teachers' Learning</i>	Lärares lärande (Torsten, Madsén red.), Studentlitteratur 1994.
	<i>Teachers and the Restructuring on School</i>	Lärare och skolans omstrukturering, Kajsa Falkner, Uppsala Studies in Education 71, 1997.
	<i>Near the Border? Perspectives on Working Life in School: Results from Nine School Research Projects at the Institute for Occupational Research in Malmö</i>	Nära gränsen?: Perspektiv på skolans arbetsliv: resultat från nio skolforskningsprojekt vid Arbetslivsinstitutet i Malmö, Arbetslivsinstitutet 2004.
	<i>See-through Dreams for the Future? Newly Immigrated Youths' Meeting with the Swedish School</i>	Osynliga framtidsdrömmar?: nyinvandrade ungdomars möte med den svenska skolan/Nashmil Aram och Carina Bildt, 2004.
	<i>Ready for the Front - a Report from Teacher Education</i>	Redo för fronten - ett reportage från Lärarhögskolan, Gunilla Granath, 1999, Ordfront förlag.
	<i>The Many Faces of School Development</i>	Skolutvecklingens många ansikten, Myndigheten för Skolutveckling, forskning i fokus, nr. 15, Gunnar Berg, Hans-Åke Scherp (red.), 2003.
	<i>Working Life and Competence - Four Experienced Women Teachers</i>	Yrkesliv och yrkeskunnsande - fyra erfarna kvinnliga lärare berättar, Görel Carlsson, Linköpings universitet, 1999.
	<i>Kommunaktuellt</i>	http://www.kommunaktuellt.com/
	<i>Lärarnas tidning</i>	http://www.lararnastidning.net/default.asp
	<i>Pedagogisk forskning i Sverige (Pedagogical research in Sweden)</i>	http://www.ped.gu.se/biorn/journal/pedfo/pedfo.html
	<i>Pedagogiska magasinet : Lärarförbundets tidskrift för pedagogisk forskning och debatt (Pedagogical Magazine: the Teachers' Union's Journal for Pedagogical Research and Debate)</i>	http://www.lararforbundet.se/web/papers.nsf/Frontpages/007DE324
	<i>Praktik & teori (Practice and Theory)</i>	http://www.lut.mah.se
	<i>Skolvärlden (School world)</i>	http://www.lr.se/lrweb/home.nsf/indexfrmset?readform
	<i>Tidskrift för lärarutbildning och forskning (Journal of research in teacher education)</i>	http://www.educ.umu.se
	<i>journals on teachers and teachings</i>	http://www.larartidningar.net/
	<i>web portal for teachers and principals</i>	http://www.skolporten.com/
Switzerland	<i>Lehren und Lernen im Kontext empirischer Forschung und Fachdidaktik</i>	Reusser, K. (2000). Unterricht zwischen Wissensvermittlung und Lernen lernen. In: C. Finkenbeiner, G. W. Schnaitmann (Hrsg.), <i>Lehren und Lernen im Kontext empirischer Forschung und Fachdidaktik</i> (p. 108-142). Donauwörth.
	<i>Causal beliefs: a neglected aspect in the analysis of teaching-learning processes?</i>	Buff, A. & Reusser, K. (2003). Causal beliefs: a neglected aspect in the analysis of teaching-learning processes? Paper presented at the Congress "Earli 2003" at Padova.
	<i>Unterrichtsqualität auf der Basis hoch-inferenter Unterrichtsbeurteilungen</i>	Clausen, M., Reusser, K. & Klieme, E. (2003). Unterrichtsqualität auf der Basis hoch-inferenter Unterrichtsbeurteilungen. Ein Vergleich zwischen Deutschland und der deutschsprachigen Schweiz. <i>Unterrichtswissenschaft</i> , 31, 122-141.
	<i>Professionelles Lehrwissen, selbstbezogene Kognitionen und wahrgenommene Schulumwelt - Ergebnisse einer kulturvergleichenden Studie deutscher und Schweizer Mathematiklehrkräfte</i>	Lipowsky, F., Thussbas, C., Klieme, E., Reusser, K. & Pauli, C. (im Druck). Professionelles Lehrwissen, selbstbezogene Kognitionen und wahrgenommene Schulumwelt - Ergebnisse einer kulturvergleichenden Studie deutscher und Schweizer Mathematiklehrkräfte. <i>Unterrichtswissenschaft</i> , 3.
	<i>Results of the National Survey on Teachers</i>	Bundesamt für Statistik - Office fédéral de la statistique (1999). <i>Lehrkräfte 1998/99 - Enseignants 1998/99</i> . Neuchâtel, BFS-OFS.
	<i>Publications of the Swiss teachers association</i>	http://www.lch.ch/
	<i>Studies on teachers' workloads</i>	Landert, C. (1999). Die Arbeitszeit der Lehrpersonen in der Deutschschweiz. Ergebnisse einer einjährigen Erhebung bei 2500 Lehrerinnen und Lehrern verschiedener Schulstufen und Kantone, LCH Zürich. Landert, C. Zufriedenheit und Unzufriedenheit im Lehrberuf Ergebnisse einer Untersuchung bei Deutschschweizer Lehrerinnen und Lehrern, LCH, Zürich.
United States	<i>Schools and Staffing Survey</i>	http://nces.ed.gov/surveys/SASS/
OECD	<i>Attracting, Developing and Retaining Effective Teachers</i>	http://www.oecd.org/home/

Network A

Network A last met in Lucerne, Switzerland, on March 18-19, 2004. The key topics discussed at this meeting were: *Education at a Glance 2005*, strategic planning and future roles for Network A, and current and future activities of the Task Force on Teaching and Learning.

Discussions at the meeting first focused on proposals for indicators for *EAG 2005*. In light of the fact that there would be a large quantity of data available next year, many members expressed a desire for more information, such as the relationship of students' performance in PISA subjects and a variety of background variables like their immigrant/language status, socio-economic status, and attitudes and engagement. Members also discussed how best to balance among indicators on mathematics (the major PISA 2003 subject) versus other subjects, on cross-curricular competencies versus key subject areas, and from different assessment programs. Taking these issues into consideration, the Network A Secretariat is currently developing several alternative multi-year proposals for indicators, and members will review draft indicators at their next meeting.

Next, members discussed the Network A strategic plan and plans for the future. Discussion involved the Network's role in relation to the PISA Governing Board (PGB), and members agreed that a possible responsibility for Network A could be an evaluation of the utility of PISA. In addition, three country-led working groups were formed in order to set priorities for activities to move the Network's

strategic plan forward. The first working group, Data, will address the issue of coordinating with other international studies and the roles of national and international assessment data. Development, the second working group, will focus on specific areas for development, such as measuring teaching competencies, assessing older student populations, and value-added studies. The third working group, Analysis, Reporting and Dissemination, will consider some of the following issues: how to use assessment data to inform practitioners, how to use *EAG* and other data at the national level, and how to relate data from PISA and national assessments. The chairs and members of the three working groups are working to refine their work plans this summer. Last, members discussed the strategy paper and the proposal for a teacher survey put out by the Task Force on Teaching and Learning.

The next Network A meeting will be in El Escorial, Spain, on October 14-15, followed by a PGB meeting October 18-20.

Network B

Network B last met February 9-11, 2004, in Canberra, Australia. At this meeting, members confirmed that Network B will focus for the next year on development work in the following areas: transition from education to work (Young Adults with a Low Level of Education-YALLE), social and economic outcomes, continuing education and training (CET), and equity. Equity is a separate dimension that will be used across the three other areas in the development of indicators.

Since the late 1990s, Network B has been involved with the implementation of the successful “transition data collection.” This year, Canada will lead the Network in focusing on the situation in the labor market for young people with low levels of education. Among other projects in the area of transition, the proposal for three indicators in *Education at a Glance 2004* on this topic is moving forward, and there will also be a final validation of YALLE data. A separate publication on the YALLE study is expected in fall 2004, shortly after the release of *EAG 2004*.

Education can contribute to both economic and social aspects of well-being, but there is a lack of indicators on these relationships. In response to a recommendation from the Strategic Management Group (SMG), Network B plans to start a project on the social outcomes of education next year. Led by the United States, the project will be carried out in cooperation with similar development work initiated by CERI.

Regarding CET, Network B has initiated a project to expand the analysis of a European Union Life Long Learning Survey module (EU-LFS-LLL) to additional OECD countries. This area of work will be led by Switzerland in cooperation with Germany and some other interested countries. A proposal for indicators stemming from this work is expected for *EAG 2005*.

As mentioned earlier, equity is an important dimension overarching all the development work being undertaken in Network B (YALLE, social and economic outcomes, and CET), and this work will be led by Belgium. A special Thematic Review within OECD is currently in

progress for “Equity in Education,” which should be published in national synthesis reports in 2004. The work for the thematic review also analyzes the same population group highlighted in Network B equity analysis.

The next Network B meeting will take place on November 8-9 in Edinburgh, Scotland.

Network C

From December 2003 to June 2004, Network C's main activities have focused on the following: finalizing the report of International Survey of Schools at the Upper Secondary level (ISUSS), preparing the indicators for *EAG 2004*, establishing the Network C's program of work for 2005-2006, and reviewing the work related to the joint Network A and C Task Force on Teaching and Learning. Network C last met in Paris on June 2-4, 2004.

The international launch of the ISUSS report, “Completing the Foundation for Lifelong Learning—An OECD survey of upper secondary schools,” took place in Stockholm on February 3, 2004. The report draws on data from 15 OECD countries: Belgium (Flanders), Denmark, Finland, France, Hungary, Ireland, Italy, Korea, Mexico, the Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland. It sheds light on how upper secondary schools are managed and financed, on their approaches to securing qualified teachers and the difficulties they face with this, and their efforts to support the professional development of teachers. It also compares student admission policies and how upper secondary schools support

students in their transition to the world of work, as well as the extent to which

schools are successful in integrating information and communication

Primer on INES

The International Indicators of Education Systems (INES) Project was begun in the late 1980's to develop data on education systems that would be comparable across countries and allow participating countries to better assess and monitor their performance in relation to other countries. Three Networks and a Technical Group, each comprised of OECD member countries on a volunteer basis and strongly supported by the OECD Secretariat, conduct the work of the INES Project.

Network A develops and prepares indicators on learning outcomes. Through its work, the Network promotes the value in using education outcomes as part of policy discussion. In addition, Network A also conducts development work to expand both the quality and range of indicators available to policy makers. The Network is comprised of thirty member countries and is chaired by the United States (Mr. Eugene Owen).

Network B develops and presents new indicators and refines existing indicators on transition from education to work and socio-economic outcomes. About twenty countries participate in activities together, and representatives from EUROSTAT and CEDEFOP also attend the meetings. The participants are country representatives and data providers and are responsible for the methods, the statistical quality, and comparability between countries. Network B is chaired by Sweden (Mr. Dan Andersson).

Network C develops indicators on the features and processes of schooling. About twenty-five countries participate in meetings and activities, including a representative from UNESCO. The Network has traditionally focused on developing indicators on teachers, such teachers' salaries, student-teacher ratio, and teachers' training and use of information communication technology (ICT). Network C is chaired by the Netherlands (Mr. Jaap Scheerens).

The **Technical Group** is responsible for providing the statistical data used for *EAG* indicators on participation, access, human and financial resources, and school completion. This involves the development of a conceptual framework for reporting on education systems. When needed, the group also conducts methodological studies to confirm the data's validity and comparability. The Technical Group is made up of thirty participating countries, as well as representatives from EUROSTAT, UNESCO, and Eurydice. The group is chaired by the OECD Secretariat.

technologies into the instructional process.

While the primary objective of the survey was to develop insights into the functioning of upper secondary school systems, it has also served to pilot new methodologies that allow for cross-country comparisons at the level of educational institutions. The further development of these methodologies will allow international comparisons to increasingly look beyond aggregate country performance and incorporate variations in the provision and process of education within countries. This, in turn, will allow for better insights into issues of equity in the provision of education.

For *EAG 2004*, Network C produced indicators on teacher compensation, teachers' teaching and working time, total intended instruction time for pupils, decision-making in education systems, and student admission, placement, and grouping policies in upper secondary schools. This latter indicator draws on data from ISSUS. The indicator on decision-making shows the percentage of educational decisions taken at specific levels in public lower secondary education. It presents results from the Network C data collection on decision-making at the lower secondary level of education and provides an update of the previous collection, which took place in 1998.

At the Paris meeting, the Network also discussed the program of work for 2005-2006. In this plan, a strong emphasis is put on the data strategy on teachers, teaching, and learning, with the focus shifting away from the way teachers perceive their status and working

conditions toward teacher and teaching effectiveness. In addition, members may explore the possibility of new system-level variables of educational performance. Examples are the existence of examination and achievement standards, accountability provisions, curriculum characteristics, structural differentiation of school, systems, and selection mechanisms. The program of work also re-established Network priorities on continued work and data quality review of the regular Network C data collection teachers and curriculum, utilization of the thematic PISA reports (from 2000 and 2003) to present indicators on quality and equity relevant school and teaching factors, and further preparatory work to operationalize a data strategy on teachers, teaching, and learning.

The Network agreed to better organize the work into subgroups. Three subgroups were established at the meeting: (1) regular Network C indicators, (2) system-level levers of educational performance, and (3) further analysis of ISUSS. There also is a fourth subgroup, which consists of the delegation of Network C participating in the Network A and C Task Force.

The next meeting of the INES Network C will be in Sesimbra, Portugal, November 8-10, 2004.

PISA Governing Board

The PISA Governing Board (PGB), formerly known as the Board of Participating Countries, last met March 15-17, 2004, in Lucerne, Switzerland. At the meeting, members discussed the following key topics: the progress of the analysis and reports from PISA 2000; the dis-

semination strategy, initial results report, and contracts for PISA 2003; and the development of the science framework and program of work for PISA 2006.

The meeting began with discussion regarding PISA 2006, during which members reviewed and established a strategy for the finalization of the science framework. They decided to proceed with the development of a conceptual framework for the 2006 context questionnaire and the establishment of an expert group to aid the development. Members also reviewed and approved the program of work and contractual arrangements with the PISA Consortium for the implementation of PISA 2006. In addition, members reviewed the ICT-based science assessment, which they found to be an appropriate basis for PISA 2006. They decided to establish it as an international option during the field trial to be managed and financed by participating countries. The PGB also discussed its potential as an integral part of the main study.

The meeting continued with discussion on PISA 2003. Members established a policy for the reporting of trend data in both international and national reports and press briefings and also discussed the advantages and disadvantages of using the term “mathematical literacy.” The

decision was made to combine into the second volume of the initial report, due out in early 2005, the problem-solving framework, assessment items, and results. In addition, members agreed to add a chapter on gender differences across math, reading, and scientific literacy. They also established the procedures and timelines for the validation and release of national and international data sets and the publication of the initial report.

Contracts were awarded for the PISA 2003 thematic report. EDUDATA at the University of British Columbia in Canada was awarded the contract for Theme 1 (mathematical literacy-student performance and engagement) and Theme 2 (teaching and learning strategies.) Contracts for the other four themes will be decided at a later date.

Regarding PISA 2000, members discussed a possible concluding report to summarize main findings. They also decided on a low-key dissemination strategy so that it would not interfere with the release of initial PISA 2003 results.

The next meeting of the PGB will be held October 18 through 20 in El Escorial, Spain.

Country Highlight: Pupil Assessment in Japan

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Japan has a three-tiered structure for governing and administering education with national, prefectural, and municipal components, all under the general supervision of the national authority, the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

School System

In 1947, the Fundamental Law of education and the School Education Law were enacted, and the 6-3-3-4 system of education was established with the goal of providing equal opportunity for education. Six years of elementary school and three years of lower secondary schools are compulsory, with nearly universal enrollment at these levels. The three years of upper secondary schools are not compulsory, but 97.3 percent of graduates of lower secondary schools do advance to upper secondary schools.

Students of the same age form a grade during the entire period of formal education. Classmates in primary and secondary schools proceed automatically to the next grade every year, almost irrespective of their educational achievement, and then receive a graduation certificate after the prescribed period. Students are not assigned to schools by achievement in elementary and lower secondary schools; and thus, students in each school are quite heterogeneous. Though some schools have introduced ability grouping, the practice is not common in Japan.

Entrance Examinations

Japanese elementary and lower secondary schools use only school-based assessment. There is no external or national assessment to screen or stream students in these schools. Only students applying to upper secondary schools or universities take entrance examinations. The exception is application to private schools, where schools at all levels can require examinations. Most students in elementary and lower secondary schools are in public school—only 0.7 percent of elementary schools and 6.3 percent of lower secondary schools are private, compared with 24 percent at the upper secondary level.

Those students who wish to enroll in upper secondary school must take entrance examinations administered by the local boards of education, in the case of public schools, or by each school, in the case of private schools. Thus entrance examinations for admission to individual schools perform the function of sorting applicants. As a result, these schools are ranked hierarchically in terms of the academic ability of their successful applicants. Although educational standards vary among upper secondary schools, their curricula are almost the same throughout the country. Upper secondary schools have places for all applicants, though it is natural for schools at the middle or bottom of the hierarchy to have a considerable number of students whose educational achievement is below the norm. These students, however, rarely must repeat a grade because of their poor marks.

National Survey of Student Achievement

In Japan, the school curriculum is prescribed as “courses of study” for elementary, lower secondary, and upper secondary schools and is used to plan classroom instruction. The courses of study have been regularly revised almost every ten years since the end of the 1940s. Revisions of these courses of study are made based on discussions among educational personnel and subject specialists, the results of which are published by MEXT and implemented by teachers. In the process of deciding the content and emphases of the revised courses of study, the results of research, including IEA studies and PISA, are taken into consideration, reflected upon and, where relevant, acted upon.

Since school-based assessment was adopted in Japan, the assessment of students has been made against the subject- or area-wise and grade-wise objectives stated in the courses of study, or national curriculum. The assessment or monitoring of student progress or achievement at the national level has not been undertaken in Japan.

Sample surveys of student achievement are conducted on an ad hoc basis, or at the time when the courses of study are revised, in order to check the level of mastery of content by the students. The surveys provide an understanding of how the courses of study are conducted and take into consideration the objectives and content of each subject. The purpose of these surveys is to examine how well the courses of study are being implemented and to clarify and improve guidance at schools. The most recent survey was conducted in 2002 for grades 4-9, and in

2003 for grade 12. Similar surveys were conducted in 1981-1983 and 1993-1995, each time after the introduction of a new courses of study. Similar surveys have been conducted by prefectural (local) boards of education.

Participation in International Comparative Studies

In addition to OECD-PISA, Japan has participated in the IEA's first and second math (FIMS and SIMS) and science (FISS and SISS) studies, as well as the three waves of the Trends in International Mathematics and Science Study (TIMSS) (1995, 1999, 2003). Participation in these studies has brought about both visible and intangible impacts on education policies, curriculum and educational practice, and the methods of educational research in Japan.

International comparative studies allow us to examine the impact and effect of policies that are applied consistently within nations but which may vary across nations. The understanding we obtain from cross-national comparisons of policies such as age of school entry, hours and methods of instruction, and teacher training can provide us with new insights into the performance of our own educational system in general, particularly the relationship between student performance and its antecedents and consequences.

PISA and IEA studies have been very helpful for Japan in identifying the strengths and weakness of Japanese students. The results of IEA studies have made it possible for us to suggest necessary changes in national curriculum, and teaching and learning strategies.

Among the countries that responded to our request for information, several described activities on national assessment activities related to test construction and examination, development, data collection, and reporting results that occurred between January and July 2004.

- In **Australia**, work is progressing on national sample assessments in science, civics and citizenship, and ICT skills. A draft report of the first national sample assessment of science in Year 6, which took place in October 2003, is currently underway. The instruments for the first national sample assessment of civics and citizenship education in Years 6 and 10 are being finalized, and the tests will take place in October 2004. Instruments are also being developed for the first national sample assessment of students' ICT skills in Years 6 and 10, and trials will be conducted later this year.
- In **Belgium (Flemish community)**, the final results from probing research on students' attainment in the first stage of secondary education were released in May. Authorities hope that these probes will provide them with an overarching view on the quality of education in the Flemish region. Using previous scientific research, researchers identified final attainment levels that students should reach. Three tests were developed, and each deals with specific subjects as well as cross-curricular skills. The study was based on a representative sample of secondary schools, taking into account urbanity of location, education sector, and school type and included almost 20 percent of all Flemish secondary schools offering the first stage of secondary education. The research team randomly selected two to four classes per school, involving 5,964 students from 122 different schools in 126 locations. The study examined participating schools, classes, and pupils at the system level, not individually, thus ensuring anonymity and guaranteeing that no schools, teachers, or students will suffer any negative consequences from the results of the study.
- **Belgium (French community)** began their current assessment program in 1994. Tests are given yearly during the first trimester of the school year to students of one grade level and on one subject matter. The main purpose of the exams is to give teachers information about their students' level of knowledge in the subject area. Members from a research department in the school administration, along with school representatives and researchers, work together to publish the results of a representative sample of students and other publications describing methods for helping students overcome the difficulties in learning the subject. Between January and June of this year, the results and research on the most recent assessment, seventh grade science, was published, and preparations are currently underway for the next assessment, ninth grade math and reading.
- In **Iceland**, the Icelandic nationwide examinations are conducted year-round in grades 4, 7, and 10. Students are tested on approximately

three years worth of material based on the nationwide curriculum set out by the Ministry of Education. Fourth and seventh grade exams are compulsory, and language arts exams in both grades cover the following areas: reading and listening, spelling, grammar, and writing. Both grades' mathematics exams cover numbers and operations, geometry, and statistics, with the seventh grade exam also assessing students' ability in fractions and pre-algebra. Tenth grade exams are offered in six different subjects: language arts (reading and literature, spelling, grammar, and writing), mathematics (numbers and operations, geometry, fractions and percents, statistics and probability, and algebra), English (listening, reading, and writing), Danish (listening, reading, and writing), natural sciences (physics, chemistry, biology, and astronomy), and social sciences (history, geography, and sociology). Students are allowed to choose the exams they wish to take but must meet the requirements of their future schooling plans. Those who plan to enter the vocational track must take the language arts and math exams, while students preparing for college need scores from language arts, math, English, and a fourth subject based on their intended area of study.

- In **Sweden**, national assessments in Swedish/Swedish as a second language (SSL), English, and mathematics were recently given in compulsory school for Years 5 and 9. Upper secondary school exams included five—one in the field of mathematics, two in English, one in Swedish/SSL. Voluntary assessments were available from a national test bank in physics,

biology, French, German, Spanish, and some vocational subjects. Tests are generally administered and scored by teachers, while university institutions work to develop new assessments on behalf of the National Agency for Education. The purpose of the Swedish assessment program is to ensure equity in grading, to present appropriate curriculum structures, to support teacher activities, and to produce follow-up data.

A few countries provided information on other, related evaluation and research activities that occurred the last few months.

- **Austria** is currently collecting data on classroom management in a study that was described in the feature article of the newsletter. This series of studies started in 1991 with the most current research published just this year. Researchers plan to improve data collection methods, which will provide topical comparative data for all types of schools.
- In **Denmark**, the Danish Evaluation Institute recently conducted an evaluation of teacher training programs. The Institute concluded that, for the most part, the teacher training programs were effective in their first objective, preparing people to teach at the primary and lower secondary level. However, these programs fell short in their second purpose, preparing students for further graduate study. To improve this aspect of the program, the evaluation makes four main recommendations. First, colleges should deny admission to applicants who fail to meet admission-based exam standards or offer supplementary courses to students who do

not meet these requirements. Second, the Ministry of Education should make attendance in the study programs mandatory in order to ensure that students are learning from the group discussions that are such a vital part of the learning process. Third, training programs should maintain the requirement of classes in four main subjects (with the exception of students who choose Danish and math because of the extra amount of classes required for these two subjects). Fourth, colleges should offer general education and teaching courses during the first two years of the program and add the subject classes later because the material taught in subject courses are often based on or draw upon the general teaching classes.

- In **Switzerland**, the Federal Statistical Office is currently working towards the release of a revision of the National Statistical Teacher Survey, which was described in the feature article of the newsletter. In addition, the Swiss Conference of Cantonal Ministers of Education has started a project, HARMOS, to bring consistency to compulsory schooling. This project will define national standards of education in the mother language, a primary foreign language, mathematics, and science in second, sixth, and ninth grade. These criteria will become the basis for future assessments to measure if students meet these standards.

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